

CASE STUDY—POLLUTION PREVENTION

ETV VERIFICATION HELPS VENDORS SELL THEIR TECHNOLOGY

The Laser Touch™ Targeting Device is manufactured by **Laser Touch and Technologies, LLC**, of Waterloo, Iowa. The Laser Touch™ can be attached to any manual paint spray gun by using either a bracket specifically designed for a particular gun or through the use of a universal adapter. The Laser Touch™ is a battery operated device that emits two laser light beams toward the surface being coated. The beams can be adjusted to converge into a single point at any distance desired by the painter. The converged beams provide the painter with a visual indication that the spray gun is being operated at the target distance. Maintaining a consistent distance to the surface being coated provides an environmental benefit through improved paint transfer efficiency (TE) and a more consistent coating finish quality.

The ETV P2 Innovative Coatings and Coating Equipment pilot evaluated the pollution prevention capabilities of the Laser Touch™ model LT-B512 targeting device. The test was conducted under representative factory conditions at the Iowa Waste Reduction Center's (IWRC's) Painting and Coating Compliance Enhancement facility in Cedar Falls, Iowa. The test was designed to verify the performance of the Laser Touch™ device and compare its environmental benefits with an unassisted manual spray application system. Ten painters coated panels without assistance, were trained on use of the Laser Touch™, and then coated additional panels with the Laser Touch™. The Laser Touch™ provided an increase in TE over the unassisted baseline, resulting in a reduction of volatile emissions of 0.1 kg/kg solids applied. In addition to reduced air emissions of volatile compounds, the TE improvement also provides an economic advantage in terms of reduced paint usage (0.2 L/kg solids applied) and solid waste generation (0.2 kg/kg solids applied) when compared to the unassisted baseline. In addition, the finish quality of the panels coated using the Laser Touch™ was improved versus the unassisted baseline.

At the November 2000 ETV stakeholder meeting for the pilot, a representative of IWRC discussed marketplace reaction to the Laser Touch™ verification results and the effect the verification has had on the marketing of the product. He noted that the pollution prevention findings appear to be the most valuable results to the end users. He highlighted immediately increased sales upon release of the Laser Touch™ Verification Report, which had continued to be sustained. In a separate communication, the vendor estimated that sales of the device increased 10 to 15 percent as a result of ETV verification. They anticipated a continued increase in sales and expansion of their market into two new industrial sectors as they launch a marketing campaign with data from the ETV Program verification. In support of their marketing efforts, the vendor paid to print 1,000 copies of the Laser Touch™ Verification Statement. In addition, the data obtained during the verification tests is being used by the California Environmental Protection Agency in the California Environmental Technology Certification Program evaluation of the Laser Touch™.